

AMENDMENT UNDER 37 CFR § 1.111
Serial No. 09/489,929

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1. [PREVIOUSLY AMENDED August 21, 2002; CURRENTLY AMENDED]
A method of controlling data traffic in a wireless data communications network comprising a plurality of wireless terminals and a base station, each wireless terminal being adapted for bi-directional data communication with the base station through a respective bi-directional wireless data communications link, the method comprising steps of:
 - a) examining performance of each wireless link to identify a poorly performing wireless link; and
 - b) ~~at least temporarily~~ interrupting bi-directional data transmission over the poorly performing wireless link.
 2. [PREVIOUSLY AMENDED August 21, 2002] A method as claimed in claim 1, wherein the step of examining performance of the wireless links comprises steps of monitoring one or more performance parameters related to each wireless link, and comparing each monitored performance parameter to a respective predetermined threshold value.
 3. [ORIGINAL] A method as claimed in claim 2, wherein the one or more performance parameters related to each wireless link are based on any one or more of a quality-of-service (QOS), and interference on the wireless link.
 4. [ORIGINAL] A method as claimed in claim 3, wherein at least one of the performance parameters related to each wireless link is based on interference on the wireless

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link, and comprises any one or more of: a signal-to-noise (S/N) ratio; a user data throughput rate; a carrier-to-interference (C/I) ratio; a bit-error-rate (BER); and a number of suspended frames.

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5. [ORIGINAL] A method as claimed in claim 4, wherein at least one of the performance parameters related to each wireless link comprises an average, taken over a number n of successive bursts, of any one or more of the S/N ratio; the C/I ratio; the user data throughput rate; and the BER.
6. [PREVIOUSLY AMENDED February 4, 2003] A method as claimed in claim 1, wherein the step of interrupting data transmission over the poorly performing wireless link comprises a step of suspending transmission of a data frame over the poorly performing wireless link.
7. [ORIGINAL] A method as claimed in claim 6, further comprising a step of resuming transmission of the data frame after a delay period.
8. [ORIGINAL] A method as claimed in claim 7, wherein the delay period is a period of random length.
9. [PREVIOUSLY AMENDED February 4, 2003] A method as claimed in claim 6, further comprising maintaining a count of suspended frames.
10. [ORIGINAL] A method as claimed in claim 9, further comprising suspending a communications session over the

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wireless link if the count of suspended frames exceeds a predetermined threshold.

11.

[PREVIOUSLY AMENDED November 29, 2001] A method as claimed in claim 10, further comprising restarting the session after a delay period.

12.

[PREVIOUSLY AMENDED November 29, 2001] A method as claimed in claim 11, wherein the delay period is of random length.

13.

[ORIGINAL] A method as claimed in claim 3, wherein at least one of the performance parameters related to each wireless link is a QOS performance parameter comprising any one or more of a data transmission delay, and a number of dropped frames.

14.

[PREVIOUSLY AMENDED August 21, 2002; February 4, 2003] A method as claimed in claim 1, wherein the step of interrupting data transmission over the poorly performing wireless link comprises a step of dropping a data frame transmitted over the poorly performing wireless link.

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[PREVIOUSLY AMENDED February 4, 2003] A method as claimed in claim 14, further comprising a step of re-transmitting the dropped frame after a delay period.

16.

[ORIGINAL] A method as claimed in claim 15, wherein the delay period is a period of random length.

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17. [ORIGINAL] A method as claimed in claim 13, further comprising maintaining a count of dropped frames.
18. [CURRENTLY AMENDED] A method as claimed in claim 17, further comprising a step of dropping the session if the number of dropped frames exceeds a predetermined threshold.
19. [ORIGINAL] A method as claimed in claim 13, wherein the step of monitoring a respective performance parameter respecting each wireless link comprises a step of predicting whether a QOS performance parameter is certain to violate a corresponding QOS requirement of a communications session on the link.
20. [PREVIOUSLY AMENDED August 21, 2002] A method as claimed in claim 19, wherein the step of interrupting data transmission over the poorly performing wireless link comprises a step of preemptively dropping a data frame being transmitted over the poorly performing wireless link.
21. [PREVIOUSLY AMENDED August 21, 2002; February 4, 2003; CURRENTLY AMENDED] A wireless data communications network comprising a base station capable of bi-directional data communication with each one of a plurality of wireless terminals over respective bi-directional wireless data communications links, the network comprising:
- a) computing means for examining performance of each wireless link of the network to identify a poorly performing wireless link; and

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b) control means for ~~at least~~ temporarily interrupting bi-directional data transmission over the identified poorly performing wireless link.

/22. [ORIGINAL] A network as claimed in claim 21, wherein the computing means comprises means for monitoring one or more performance parameters related to each wireless link, and comparing each monitored performance parameter to a respective predetermined tolerance.

23. [ORIGINAL] A network as claimed in claim 22, wherein the one or more performance parameters related to each wireless link are based on any one or more of a quality-of-service (QOS), and interference on the wireless link.

/24. [ORIGINAL] A network as claimed in claim 23, wherein at least one of the performance parameters related to each wireless link is based on interference on the link, and comprises any one or more of: a signal-to-noise (S/N) ratio; a carrier-to-interference (C/I) ratio; a bit-error-rate (BER); a user data throughput rate; and a number of suspended frames.

/25. [ORIGINAL] A network as claimed in claim 24, wherein at least one of the performance parameters related to each wireless link comprises an average, taken over a number n of successive bursts, of any one or more of the S/N ratio; the C/I ratio; the user data throughput rate; and the BER.

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26. [PREVIOUSLY AMENDED February 4, 2003] A network as claimed in claim 21, wherein the control means is adapted to suspend transmission of a data frame over the poorly performing wireless link.
27. [ORIGINAL] A network as claimed in claim 26, further comprising means for resuming transmission of the data frame after a delay period.
28. [ORIGINAL] A network as claimed in claim 27, wherein the delay period is a period of random length.
29. [PREVIOUSLY AMENDED February 4, 2003] A network as claimed in claim 26, wherein the computing means is further adapted to maintain a count of suspended frames..
30. [ORIGINAL] A network as claimed in claim 29, wherein the control means is adapted to suspend a communications session over the wireless link if the count of suspended frames exceeds a predetermined threshold.
31. [PREVIOUSLY AMENDED November 29, 2001] A network as claimed in claim 30, further comprising means for restarting the session after a delay period.
32. [PREVIOUSLY AMENDED November 29, 2001] A network as claimed in claim 31, wherein the delay period is of random length.
33. [ORIGINAL] A network as claimed in claim 23, wherein at least one of the performance parameters concerning each

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wireless link is a QOS performance parameter comprising any one or more of a data transmission delay, and a number of dropped frames.

34. [ORIGINAL] A network as claimed in claim 33, wherein the control means is adapted to drop a data frame transmitted over the poorly performing wireless link.
35. [PREVIOUSLY AMENDED February 4, 2003] A network as claimed in claim 34, further comprising means for re-transmitting the dropped frame after a delay period.
36. [ORIGINAL] A network as claimed in claim 35, wherein the delay period is a period of random length.
37. [ORIGINAL] A network as claimed in claim 33, wherein the computing means is adapted to maintain a count of dropped frames.
38. [ORIGINAL] A network as claimed in claim 37, wherein the control means is adapted to drop the session if the count of dropped frames exceeds a predetermined threshold.
39. [ORIGINAL] A network as claimed in claim 33, wherein the computing means is adapted to compute a probability respecting whether the QOS performance parameter is certain to violate a corresponding QOS requirement of a communications session on the link.
40. [ORIGINAL] A network as claimed in claim 39, wherein the control means is adapted to preemptively drop a data frame

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being transmitted over the poorly performing wireless link.

41. [PREVIOUSLY AMENDED August 21, 2002; February 4, 2003; CURRENTLY AMENDED] A base station in a wireless data communications network, the base station being adapted for bi-directional data communications with each one of a plurality of wireless terminals over respective bi-directional wireless communications links, the base station comprising:

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- a) computing means for examining performance of each wireless link of the network to identify a poorly performing wireless link; and
 - b) control means for ~~at least~~ temporarily interrupting bidirectional data transmission over the identified poorly performing wireless link.

42. [ORIGINAL] A base station as claimed in claim 41, wherein the computing means comprises means for monitoring one or more performance parameters related to each wireless link, and comparing each monitored performance parameter to a respective predetermined tolerance.

43. [ORIGINAL] A base station as claimed in claim 42, wherein the one or more performance parameters related to each wireless link are based on any one or more of a quality-of-service (QOS), and interference on the link.

44. [ORIGINAL] A base station as claimed in claim 43, wherein at least one of the performance parameters related to each

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wireless link is based on interference on the link, and comprises any one or more of: a signal-to-noise (S/N) ratio; a user data throughput rate; a carrier-to-interference (C/I) ratio; a bit-error-rate (BER); and a number of suspended frames.

45. [ORIGINAL] A base station as claimed in claim 44, wherein at least one of the performance parameters related to each wireless link comprises an average, taken over a number n of successive bursts, of any one or more of the S/N ratio; the C/I ratio; the user data throughput rate; and the BER.

46. [ORIGINAL] A base station as claimed in claim 44, wherein the control means is adapted to suspend transmission of a data frame over the poorly performing wireless link.

47. [PREVIOUSLY AMENDED February 4, 2003] A base station as claimed in claim 46, wherein the computing means is further adapted to maintain a count of a number of suspended frames.

48. [ORIGINAL] A base station as claimed in claim 47, wherein the control means is adapted to suspend a communications session over the link if the count of suspended frames exceeds a predetermined threshold.

49. [ORIGINAL] A base station as claimed in claim 43, wherein at least one of the performance parameters related to each wireless link is a QOS performance parameter comprising any one or more of a data transmission delay, and a number of dropped frames.

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50. [ORIGINAL] A base station as claimed in claim 49, wherein the control means is adapted to drop a data frame transmitted over the poorly performing wireless link.

51. [PREVIOUSLY AMENDED February 4, 2003] A base station as claimed in claim 50, wherein the computing means is adapted to maintain a count of dropped frames.

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52. [ORIGINAL] A base station as claimed in claim 51, wherein the control means is adapted to drop the session if the count of dropped frames exceeds a predetermined threshold.

53. [ORIGINAL] A base station as claimed in claim 49, wherein the computing means is adapted to compute a probability respecting whether the QOS performance parameter is certain to violate a corresponding QOS requirement of a communications session on the wireless link.

54. [ORIGINAL] A base station as claimed in claim 53, wherein the control means is adapted to preemptively drop a data frame being transmitted over the poorly performing wireless link.